

## MATRIX 2: Digital Support Features

**Digital Support Features** are specific embedded features in digital learning resources (DLRs) that assist students in understanding or communicating the content and/or activities provided in the DLR. This is a preliminary list to prompt further discussion among developers and educators.

| <i>Support Feature Category</i>       | <i>Definition</i>   | <i>Category</i>                                 | <i>Examples</i>  |
|---------------------------------------|---|---|--|
| <b>Visual Support Features</b>        | Provide visual images or other visual supports to assist a student in understanding and/or communicating a concept or idea.               | <b>Visual definition</b>                        | Links to a video or image(s) providing a visual definition of a concept or word.   |
|                                       |   | <b>Interactive visual features</b>              | Manipulable visual representation of a concept, such as a graphing calculator feature integrated into a DLR, providing representations of concepts based upon information that a student enters.   |
|                                       |   | <b>Closed captioning</b>                        | Text shown on the video screen provides print as well as audio that is useful for English learners still developing their ability to understand spoken English.  |
| <b>Auditory Support Features</b>      | Provide speech or other use of sound to assist a student in understanding and/or communicating a concept or idea.                         | <b>Auditory definition</b>                      | Allows students to click on a word to hear a definition of a concept or word.  |
|                                       |   | <b>Text-to-speech for text selection</b>        | Reads aloud text such as a selection on academic content, a story, directions for a lab experiment, or math questions; might include options to play, pause, adjust the volume, and/or control the speed at which the text is read. The language used may be English or another language, depending on the materials used. |
|                                       |   | <b>Text-to-speech for highlighted word</b>      | Allows readers to hear an individual word or phrase.   |
|                                       |   | <b>Record and replay voice</b>                  | Enables students to record their voice; replay it so that they can hear their own voice, perhaps make adjustments to and/or practice pronunciation, practice their part in a presentation, or save for sharing with others.  |
| <b>Translation Support Features</b>   | Provide embedded functions to translate from one language to the other, in either speech or print, and for either a word or limited text. | <b>Spoken word translation</b>                  | Enables a student to hear a spoken translation in his/her home language of an unfamiliar English word.   |
|                                       |   | <b>Printed word translation</b>                 | Enables a student to view a written translation in his/her home language of an unfamiliar English word.  |
|                                       |   | <b>Spoken text translation</b>                  | Enables a student to hear spoken statements in one language as spoken in another language.   |
|                                       |   | <b>Printed text translation</b>                 | Enables a student to view a section of text in one language as written in another language.  |
| <b>Collaboration Support Features</b> | Embedded functions that students use to communicate, collaborate, work, or share information about academic content.                      | <b>Document sharing</b>                         | Allows multiple students to share a digital document and use annotation tools to add notes or comments.  |
|                                       |   | <b>Collaboration based on proficiency level</b> | Allows students to collaborate with peers according to their proficiency levels (e.g., peers at the same Lexile reading comprehension level).  |

Note: This matrix is a preliminary summary of supports created for the toolkits based on insights gained through the NSELD research.

Source: U.S. Department of Education, Office of Planning, Evaluation and Policy Development, Policy and Program Studies Service. (2018). *National Study of English Learners and Digital Learning Resources*. Washington, DC: Author.